UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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May 16, 2005

Ref: 8EPR-N

Liane Mattson
Project Leader
2250 Highway 50
Delta, Colorado 81416

Re: Dry Fork Coal Lease-by-Application –
West Elk Mine, DEIS Review 20050136

Dear Ms Mattson:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, Region 8 of the Environmental Protection Agency (EPA) has reviewed and rated the *Draft Environmental Impact Statement (DEIS) for the Dry Fork Federal Coal Lease-by-Application (LBA) (COC-67232)*, dated April 2005. The LBA tract is 1517 acres located adjacent to the existing underground workings of the West Elk Mine near Paonia, Colorado.

Based on the procedures EPA uses to evaluate the potential effects of proposed actions and the adequacy of the information in the DEIS, the project will be listed in the Federal Register in the category EC-2 (EC - Environmental Concerns, 2 - Insufficient Information). This rating means that the review identified environmental impacts that should be avoided in order to fully protect the environment and the DEIS does not contain sufficient information to thoroughly assess environmental impacts that should be avoided to fully protect the environment.

EPA's main concerns regarding the proposed expansion of underground mining into the Dry Fork LBA are:

- Reducing the impacts of roads to habitat, vegetation, soils,
- Maintaining an adequate buffer between motorized recreation and the West Elk, Wilderness Area, particularly south of NFSR 711 route,
- Managing and monitoring subsidence from coal mining in wetland areas, and
- Utilizing the methane gas emissions as an energy resource which will also reduce greenhouse gas emissions.

Our detailed comments are attached.

If you have any questions about these comments, please contact Dana Allen at (303) 312-6870 or allen.dana@epa.gov. We appreciate your interest in our comments.

Sincerely,

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Larry Svoboda, Director
NEPA Program
Ecosystem Protection and Remediation

Enclosure

cc: Elaine Suriano, EPA HQ

EPA Region 8 Comments
Dry Fork Coal LBA, West Elk Mine DEIS
May 2005

1. Approximately 621 acres of the 1,517-acre LBA are within the former West Elk Inventory Roadless Area (IRA), page 3-66, first paragraph. Although the area has not been recommended for future wilderness designation, the generally roadless character contributes to habitat and disbursed recreation values, and limits erosion from roads and trails. Our concern is that roads constructed for the coal mine will encourage more motorized and off road recreation. We recommend that the indirect impacts to habitat, recreation and water quality (sediment) be mitigated by expanding the area that lease stipulations apply to for road construction and access. Currently, the stipulations are limited to a small area of the LBA identified as potential lynx habitat. In particular, all roads should be designed for effective closures and should be reclaimed if they are no longer needed for other management objectives. Public access should be restricted on all new roads constructed for coal mining purposes.

2. Page 3-4, column 2, first paragraph, discusses the methane draining emissions from the existing West Elk Mine which produces between 2 and 5 million cubic feet of methane per day (for 10 wells). Methane (CH_4) is a potent greenhouse gas that remains in the atmosphere for approximately 9-15 years. Methane is over 20 times more effective in trapping heat in the atmosphere than carbon dioxide (CO_2). Coal bed methane is also in great demand as an energy source. As described in the EIS, this area has also been designated for future oil and gas leasing.

   Are there alternatives that could be developed to reduce methane emissions and use the methane as an energy source? For example, could the coal and gas resources be leased as a package (leased at the same time and to the same bidder)? Depending on the gas resources, it may be possible to develop the area first for gas to be used locally or for power generation. If the gas collection drilling pads (several wells per pad with directional drilling) could be developed in the same location as future gob area [mined out areas filled with rubble created when the roof of a coal mine collapses after mining]. By coordinating road development for mine ventilation and gas extraction, wells there may be reductions in long-term impacts.

3. The document states there are no wetlands within the LBA (page 3-29, first paragraph). However, the next paragraphs regarding Deep Creek describe plants communities that are typically found in a riparian wetland: ". . . alder growing in the understory with a V-shaped stream channel morphology." The 4th paragraph discusses the more open benched-land riparian areas in the upper reaches that ". . .were once beaver dams now filled with tall willow, alder, and sedges (Carex sp.)." Riparian vegetation containing alder are often times "wetlands", as well as the montane wetland communities found in the upper reaches. It appears that the conclusion of no wetlands is not supported by vegetative conditions. A good rule of thumb for identifying wetlands is: areas which

have more than 50% wetland plants and are saturated for two weeks or more during the growing season. We recommend that the wetlands resources be more fully disclosed in the FEIS including mapping, and identification of wetland functions and values. Any identified wetlands and their functions should be protected.

4. The FEIS should also outline reclamation efforts to reduce/mitigate potential impacts caused by subsidence. The environmental affects describe potential riparian ecosystem problems due to subsidence if surface cracks appear (page 3-30). "These surface cracks may alter surface flow, either minimizing or enlarging (pooling) the riparian ecosystem, and are dependent on gradient." The subsidence report indicates that these effects would be minor and short-term, generally lasting less than two years, which would not allow enough time for vegetation to be affected. However, wetland hydrology can be altered significantly even by the most minor changes in hydrology, especially in slope wetland conditions. The Protection of Wetlands Executive Order 11990 directs the federal agencies to take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agencies responsibilities. It further directs that the agency must avoid impacts unless the agency finds there is no practicable alternative and that the proposed action includes all practicable measures to minimize harm to wetlands which may result.

   The FEIS should summarize the mining permits and procedures that will be used to monitor, avoid or mitigate wetland impacts. We understand that the specific plan will be developed later as part of the mine plan. Monitoring plans should include a pre-project baseline condition of the wetlands (dominant wetland plant communities with mapping) with some documented understanding of the hydrology supporting these wetland communities (especially the bigger wetland areas). Mitigation plans should be submitted prior to construction to adequately compensate for lost or adversely impacted wetlands communities should impacts be discovered in the monitoring of these aquatic ecosystems.
5. The Forest Plan will be relied upon to address direct impacts to wetlands from road crossings. The FEIS should identify if there are any additional wetland resources that may be affected by road construction. Although we understand the road locations have not been identified, we recommend that the FEIS identify riparian or wetland resources that should be avoided as the mine design proceeds.

6. In future EISs, we recommend improving cumulative impacts analysis. The two main problems with the environmental analysis in the DEIS are: (1) overly narrow scope of analysis and (2) inconsistent approach to conducting environmental analysis. Most resource section in the DEIS had a different interpretation of the appropriate cumulative impacts analysis. CEQ's guidance manual *Considering Cumulative Effects Under the National Environmental Policy Act*, http://ceq.eh.doe.gov/nepa/ccenepa/ccenepa.htm would be useful in developing a consistent approach compatible with the regulations and to determining the scope of cumulative impact analysis for various resources.

   For example on page 3-1, first column, third paragraph, limits the entire impact analysis (including cumulative impacts) ". . . to the geographic and temporal scope of the

project." Restricting the impact analysis to the project defeats the purpose of the indirect and cumulative impact analysis. Instead, the geographic and temporal scope of the environmental analysis should correspond to the resource. For example, the air analysis should cover the airshed, not just the air over the mine. The temporal scope of analysis should also correspond to the resource. For example, the analysis for endangered birds or animals may go back to times when there were viable populations. Fortunately, most of the DEIS sections used a broader scope of analysis than described in the opening statement.